Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11301	esterase$1	US-PGPUB; USPAT	OR	OFF	2004/03/22 09:42
L2	88513	ferulic or cinnamic or phenolic or coumaric or feruloyl or cinnamoyl or coumaroyl	US-PGPUB; USPAT	OR	OFF	2004/03/22 09:42
L3	64	1 near2 2	US-PGPUB; USPAT	OR	OFF	2004/03/22 09:42

PGPUB-DOCUMENT-NUMBER: 20040018255

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040018255 A1

TITLE: Dietary fiber, process for preparing it, and augmented dietary fiber from almond hulls

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rabinowitz, Israel N.	Santa Barbara	CA	US	

APPL-NO: 10/ 202506

DATE FILED: July 24, 2002

US-CL-CURRENT: 424/735

ABSTRACT:

Dietary fiber derived from almond hulls (the dried mesocarp of the senescent almond) enhanced by the treatment with yeasts to remove sugars.

---------- KWIC ---------

Detail Description Paragraph - DETX (18):

[0035] Additional cancer chemoprevention may be effected by proving higher concentrations of lignin fractions, such as lignans, made available to the large intestine and colon. Little is known about lignin degrading enzymes in the human gut, but it is known that there is low level activity of one such enzyme, ferulic acid esterase (FAE) in the human gut. Therefore (see FIG. 2) almond fruit DF, in an aqueous suspension of 100 u-500 u particles, approximately 30% total solids, is exposed to an ferulic acid esterase (FAE) enzyme of high activity, at 37 degrees C., with good stirring for 5 to 24 hours. The enzyme will be used in the ratio of approximately 0.5 to 1.0 Kg per 1000 Kg. of total DF solids. At the end of the FAE enzyme treatment, a human food grade protease enzyme, such as papain or bromelain, will be added to the reaction mixture for 30-60 minutes at temperature between 55 degrees to 70 degrees C. to reduce the FAE protein to amino acids and peptides, and the DF suspension will then be spray dried to a dry powder, as described above. Additional benefit of the FAE treatment is breaking of bonds between lignin and polysaccharide, thus exposing more of the arabinan-xylan galactan polymer region for effective action.

PGPUB-DOCUMENT-NUMBER: 20040014185

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040014185 A1

TITLE: Method for the production of xylitol

PUBLICATION-DATE: January 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ojamo, Heikki	Kirkkonummi		FI	
Penttila, Merja	Helsinki		FI	
Heikkila, Heikki	Espoo		FI	
Uusitalo, Jaana	Espoo		FI	
Ilmen, Marja	Helsinki		FI	
Sarkki, Marja-Leena	Kantvik		FI	
Vehkomaki, Maija-Leena	Espoo		FI	

APPL-NO: 10/ 341220

DATE FILED: January 13, 2003

RELATED-US-APPL-DATA:

child 10341220 A1 20030113

parent continuation-in-part-of PCT/FI01/00663 20010711 US UNKNOWN

non-provisional-of-provisional 60217926 20000713 US

US-CL-CURRENT: 435/158, 435/254.2

ABSTRACT:

The invention relates to a method for the production of xylitol, the method comprising
(a1) providing (i) a microorganism having xylanolytic activity, and (ii) a microorganism capable of converting a pentose sugar to xylitol; or
(a2) providing a microorganism having xylanolytic activity and being capable of converting a pentose sugar to xylitol,
(b) culturing the microorganism of step (al) (i) or the microorganism of step (a2) in a medium comprising polymer or oligomer materials containing pentose sugars in conditions sufficient for enabling hydrolysis of said polymers or oligomers by the microorganism;
(c) producing xylitol in the microorganism of step (a1) (ii) or in the microorganism of step (a2) by bioconversion of the hydrolysis products obtained in step (b), and
(d) recovering said xylitol produced.
The invention also relates to a microorganism, which has xylanolytic activity and has been genetically modified (i) to enhance its xylanolytic activity, and (ii) to reduce its xylitol metabolism.

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part application of International Application No. PCT/F101/00663, filed Jul. 11, 2001, which claims benefit of

---------- KWIC ---------

Detail Description Paragraph - DETX (7):

[0062] In connection with the present invention, "xylanolytic activity" means any enzymatic activity capable of catalysing the breakdown of hemicelluloses, pentosan-containing material and xylan-containing material, including e.g. pentosanases, xylanases, such as 1,4-beta-D-xylanohydrolase, hemicellulases, glycosidases, xylosidases, such as .beta.-xylosidase, arabinosidases and arabinanases, glucuronidases, acetylxylan esterases, ferulic acid esterases, coumaric acid esterases, mannanases and mannosidases, galactanases and galactosidases, rhamnosidases, galacturonidases. The most important enzyme activities in the utilisation of xylan and/or xylo-oligosaccharide containing plant-derived materials are those performed by endoxylanases and .beta.-xylosidases, the other activities being mainly auxiliary in nature.

PGPUB-DOCUMENT-NUMBER: 20040009262

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040009262 A1

TITLE: Vegetable processing

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Chukwu, Uchenna N.	Minnetonka	MN	US	

APPL-NO: 10/ 619403

DATE FILED: July 14, 2003

RELATED-US-APPL-DATA:

child 10619403 A1 20030714

parent continuation-in-part-of 09495960 20000202 US ABANDONED

child 09495960 20000202 US

parent continuation-in-part-of 09196844 19981120 US GRANTED

parent-patent 6033692 US

US-CL-CURRENT: 426/44, 426/52

ABSTRACT:

A method of processing a vegetable that includes providing a vegetable composition having a first outer layer to which an enzyme is applied for a time that is sufficient to form an enzyme-degraded vegetable. The enzyme-degraded vegetable is capable of absorbing components, such as water, additives or enzymes that further process the vegetable.

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This application is a continuation-in-part of application Ser. No. 09/495,960, filed Apr. 1, 2002, now abandoned, which is a continued prosecution application of application Ser. No. 09/495,960, filed Feb. 2, 2000, now abandoned, which is a continuation-in-part of application Ser. No. 09/196,844, filed on Nov. 20, 1998, now U.S. Pat. No. 6,033,692.

---------- KWIC ---------

Detail Description Paragraph - DETX (10):

[0015] Besides cellulase, it is believed that other carbohydrases, such as hemicellulase, alpha-galactosidase, invertase, mannanase, beta-gluconase, beta-glucanase, arabanase, polygalacturonase, ferulic acid esterase, xylanase, beta-galactosidase, beta-fructofuranosidase, alpha-amylase, beta-amylase, pectinase, pectin depolymerase, pectin methyl esterase, pectin lyase, glucoamylase, oligo-1,6 glucosidase, lactase, beta-d-glucosidase, or any

combination of any of these are suitable additional non-exhaustive examples of carbohydrases that may be used separately or in combination with cellulase in accordance with the present invention.

PGPUB-DOCUMENT-NUMBER: 20040005674

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040005674 A1

TITLE: Methods for enzymatic hydrolysis of lignocellulose

PUBLICATION-DATE: January 8, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Duck, Nicholas B.	Apex	NC	US	
Carr, Brian	Raleigh	NC	US	
Koziel, Michael G.	Raleigh	NC	US	
Carozzi, Nadine	Raleigh	NC	US	
Berg, Brian Vande	Durham	NC	US	

APPL-NO: 10/ 426111

DATE FILED: April 29, 2003

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60376527 20020430 US

non-provisional-of-provisional 60432750 20021212 US

US-CL-CURRENT: 435/105

ABSTRACT:

Compositions and methods for biomass conversion are provided. Compositions comprise novel enzyme mixtures that can be used directly on lignocellulose substrate. Methods involve converting lignocellulosic biomass to free sugars and small oligosaccharides with enzymes that break down lignocellulose. Novel combinations of enzymes are provided that provide a synergistic release of sugars from plant biomass. Also provided are methods to identify enzymes, strains producing enzymes, or genes that encode enzymes capable of degrading lignocellulosic material to generate sugars.

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Application Serial No. 60/376,527, filed Apr. 30, 2002, and U.S. Provisional Application Serial No. 60/432,750, filed Dec. 12, 2002, the contents of which are herein incorporated by reference in their entirety.

---------- KWIC --------

Summary of Invention Paragraph - BSTX (51):

[0048] "Ligninases" includes enzymes that can hydrolyze or break down the structure of lignin polymers. Enzymes that can break down lignin include lignin peroxidases, manganese peroxidases, laccases and feruloyl esterases, and other enzymes described in the art known to depolymerize or otherwise break lignin polymers. Also included are enzymes capable of hydrolyzing bonds formed between hemicellulosic sugars (notably arabinose) and lignin.

Summary of Invention - Table CWU - BSTL (4):

4 Name Used in this EC application Classification Alternate Names Reaction catalyzed Lignin 1.11.1 none Oxidative degradation of lignin peroxidase Manganese 1.11.1.13 Mn-dependent Oxidative degradation of lignin peroxidase peroxidase Laccase 1.10.3.2 Urishiol oxidase Oxidative degradation of lignin Feruloyl esterase 3.1.1.73 Ferulic acid esterase; Hydrolyzes bonds between arabinose Hydroxycinnamoyl and lignin esterase; Cinnamoyl ester hydrolase

PGPUB-DOCUMENT-NUMBER: 20040002136

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040002136 A1

TITLE: Transformation system in the field of filamentous fungal hosts

PUBLICATION-DATE: January 1, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Emalfarb, Mark Aaron	Jupiter	FL	US	
Burlingame, Richard Paul	Manitowoc	WI	US	
Olson, Philip Terry	Manitowoc	WI	US	
Sinitsyn, Arkady	Moscow	WI	RU	
Panteleimonovich	Toulouse		FR	
Parriche, Martine	Quint-Fonsegrives		FR	
Bousson, Jean Christophe	Appleton		US	
Pynnonen, Christine Marie	Houten		NL	
Punt, Peter Jan	Vleuten-De Meern		NL	
Van Zeijl, Cornelia Maria Johanna				

APPL-NO: 10/ 394568

DATE FILED: March 21, 2003

RELATED-US-APPL-DATA:

child 10394568 A1 20030321

parent continuation-of 09548938 20000413 US GRANTED

parent-patent 6573086 US

child 10394568 A1 20030321

parent continuation-in-part-of PCT/EP98/06496 19981006 US UNKNOWN

child 10394568 A1 20030321

parent continuation-in-part-of PCT/NL99/00618 19991006 US UNKNOWN

US-CL-CURRENT: 435/69.1, 435/189 , 435/193 , 435/196 , 435/200 , 435/219 , 435/254.2 , 435/320.1 , 536/23.2

ABSTRACT:

A novel transformation system in the field of filamentous fungal hosts for expressing and secreting heterologous proteins or polypeptides is described. The invention also covers a process for producing large amounts of polypeptide or protein in an economical manner. The system comprises a transformed or transfected fungal strain of the genus Chrysosporium, more particularly of Chrysosporium lucknowense and mutants or derivatives thereof. It also covers transformants containing Chrysosporium coding sequences, as well expression-regulating sequences of Chrysosporium genes. Also provided are

novel fungal enzymes and their encoding sequences and expression-regulating sequences.

---------- KWIC ---------

Detail Description Paragraph - DETX (113):

[0212] The 100 kD protein with pI 4,5 possessed activity only toward p-nitrophenyl butyrate. It is probably an esterase but is not a feruloyl esterase as it had no activity against methyl ester of ferulic acid. It had neutral/alkalinepH optimum (pH 8-9) and optimal temperature of 55-60.degree. C.

US-PAT-NO: 6699515

DOCUMENT-IDENTIFIER: US 6699515 B2

TITLE: Process for the production of alcoholic beverages using maltseed

DATE-ISSUED: March 2, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Souppe; Jerome	Wasquehal	N/A	N/A	FR
Beudeker; Robert Franciscus	Den Hoorn	N/A	N/A	NL

APPL-NO: 09/ 970616

DATE FILED: October 4, 2001

PARENT-CASE:

This application is a continuation of application No. 09/230,590 filed on Apr. 28, 1999 now U.S. Pat. No. 6,361,808, which is International Application PCT/EP97/04016 filed on Jul. 23, 1997, which designated the U.S., was published in English, claims the benefit thereof and incorporates the same by reference.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
EP	96202195	August 5, 1996

US-CL-CURRENT: 426/11, 426/29

ABSTRACT:

The invention relates to a process for the production of alcoholic beverages such as beer or whiskey with a mixture of enzymes comprising an endo-.beta.(1,4)-xylanase, an arabinofuranosidase, an alpha-amylase, an endo-protease and a .beta.-(1,3; 1,4)-glucanase, and optionally, a saccharifying amylase and/or an exopeptidase. Preferable are mixtures in which the enzymes which are necessary in the brewing process are provided by transgenic seeds. Only a minor amount of malt may be necessary for flavor and color.

15 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

---------- KWIC ---------

Drawing Description Text - DRTX (9):

Hemicellulolytic enzymes comprise enzymes like .beta.-1,3-1,4-glucanase, xylanase, endo-arabinanase, arabinofuranosidase, arabinoxylanase, arabinogalactanase, ferulic acid esterase.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 09:46:44 ON 22 MAR 2004

=> fil .bec
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 09:47:03 ON 22 MAR 2004

11 FILES IN THE FILE LIST

=> s esterase#
FILE 'MEDLINE'
L1 22733 ESTERASE#

FILE 'SCISEARCH'
L2 13616 ESTERASE#

FILE 'LIFESCI'
L3 5726 ESTERASE#

FILE 'BIOTECHDS'
L4 2209 ESTERASE#

FILE 'BIOSIS'
L5 44409 ESTERASE#

FILE 'EMBASE'
L6 14472 ESTERASE#

FILE 'HCAPLUS'
L7 33536 ESTERASE#

FILE 'NTIS'
L8 300 ESTERASE#

FILE 'ESBIOBASE'
L9 3693 ESTERASE#

FILE 'BIOTECHNO'
L10 4672 ESTERASE#

FILE 'WPIDS'
L11 2487 ESTERASE#

TOTAL FOR ALL FILES
L12 147853 ESTERASE#

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949 CINNAMIC
7346 PHENOLIC
1215 COUMARIC
214 FERULOYL
288 CINNAMOYL
238 COUMAROYL
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          1310 COUMARIC
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           776 CINNAMOYL
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           272 COUMARIC
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            94 CINNAMOYL
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FILE 'BIOTECHDS'
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            69 FERULOYL
            67 CINNAMOYL
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L16        2018 FERULIC OR CINNAMIC OR PHENOLIC OR COUMARIC OR FERULOYL OR CINNA
                MOYL OR COUMAROYL

FILE 'BIOSIS'
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          2552 CINNAMIC
         18168 PHENOLIC
          2097 COUMARIC
           521 FERULOYL
           667 CINNAMOYL
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          1719 CINNAMIC
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           164 FERULOYL
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FILE 'NTIS'
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          1899 PHENOLIC
            11 COUMARIC
             1 FERULOYL
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           468 COUMARIC
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TOTAL FOR ALL FILES
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FILE 'SCISEARCH'
L26         171 L14(3A)L2

FILE 'LIFESCI'
L27          70 L15(3A)L3

FILE 'BIOTECHDS'
L28          58 L16(3A)L4
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FILE 'BIOSIS'
L29         166 L17(3A)L5

FILE 'EMBASE'
L30          81 L18(3A)L6

FILE 'HCAPLUS'
L31         238 L19(3A)L7

FILE 'NTIS'
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FILE 'ESBIOBASE'
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FILE 'BIOTECHNO'
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FILE 'WPIDS'
L35          14 L23(3A)L11

TOTAL FOR ALL FILES
L36        1043 L24(3A) L12

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       3097955 1998-2004/PY
L37          26 L25 NOT 1998-2004/PY

FILE 'SCISEARCH'
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L38          68 L26 NOT 1998-2004/PY

FILE 'LIFESCI'
        643829 1998-2004/PY
L39          32 L27 NOT 1998-2004/PY

FILE 'BIOTECHDS'
        109318 1998-2004/PY
L40          26 L28 NOT 1998-2004/PY

FILE 'BIOSIS'
       3372949 1998-2004/PY
L41          65 L29 NOT 1998-2004/PY

FILE 'EMBASE'
       2759058 1998-2004/PY
L42          32 L30 NOT 1998-2004/PY

FILE 'HCAPLUS'
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L43          94 L31 NOT 1998-2004/PY

FILE 'NTIS'
        120471 1998-2004/PY
L44           0 L32 NOT 1998-2004/PY

FILE 'ESBIOBASE'
       1759494 1998-2004/PY
L45          20 L33 NOT 1998-2004/PY

FILE 'BIOTECHNO'
        724097 1998-2004/PY
L46          33 L34 NOT 1998-2004/PY
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)

FILE 'WPIDS'
4963089 1998-2004/PY
L47 1 L35 NOT 1998-2004/PY

TOTAL FOR ALL FILES
L48 397 L36 NOT 1998-2004/PY

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	27.84	28.05

STN INTERNATIONAL LOGOFF AT 09:53:13 ON 22 MAR 2004